IN THE CLAIMS:

1.-14. (Canceled)

15. (Previously Presented) A method of forming a circuit feature on a plurality of substrates in a semiconductor production line, the method comprising:

preparing said substrates for receiving a resist mask corresponding to said circuit feature;

establishing an exposure map for a step and repeat exposure of said substrates;

updating said exposure map for a plurality of specified locations on a specified one of said substrates on the basis of:

inline measurement data obtained from one or more of said substrates, wherein at least a portion of said inline measurement data is obtained from substrates prior to exposure and from substrates after exposure; and

electrical measurement data related to said circuit feature after said circuit feature is completed;

exposing said specified substrate with said updated exposure map to form said resist mask; and

performing a manufacturing sequence to form said circuit feature by using said resist mask.

16.-25. (Canceled)

26. (Previously Presented) An advanced exposure tool control system, comprising:

a control unit operatively connectable to an exposure tool and configured to adjust at least one exposure parameter of said exposure tool, said control unit being further configured to:

receive information about an inline parameter indicative of a characteristic of a predefined location on a plurality of substrates, said information comprising:

inline measurement data obtained from one or more of said substrates, wherein at least a portion of said inline measurement data is obtained from substrates prior to exposure and from substrates after exposure; and

electrical measurement data related to a circuit feature on one of said substrates after said circuit feature is completed; and

update said at least one exposure parameter for said predefined location on the basis of said information.